

REMARKS

The Examiner has rejected claims 1-3, 11, 23 and 26 under 35 USC §103 (a) as being unpatentable over Wall US Patent 4,152,943 in view of Anderegg US Patent 6,431,790 or Borsutzki US Patent 3,719,094.

Applicant has amended claims 1, 4, 11, and 15 to better define that which is regarded as the invention. Specifically, claims 1, 11 and 23 have been amended to specifically recite that the planetary gearbox has “first and second planetary gear arrangements”, this additional feature is neither taught nor suggested in either of the Anderegg or Borsutzki references. The Anderegg reference discloses in **words only** that the gear arrangement 53 is a **planetary gear**; this error in choice of words can only be a result of translating the priority PCT application into the English language. However, Applicant and anyone skilled in the art of gearing and drive trains can conclude directly from a review of Fig. 8 and the written description, specifically the paragraph starting at line 55 of column 10 and carrying over to the top of column 11, that the drive train in Anderegg does not disclose even a single planetary arrangement, despite Anderegg’s use of the term **planetary gear**. Applicant again reminds the Examiner of the definition of a planetary gear arrangement as set forth in paper 8 mailed September 5, 2003 is “A planetary gear arrangement includes a sun gear and at least one planetary gear that revolves around the sun gear.” The passage in Anderegg describes three different gear sets and reads as follows: “The planetary gearing shown in FIG. 8 is driven by a drive 54 via a spindle 55, which acts directly on the unbalance 56 and without any intermediate gears. On the spindle 55 a tooth lock washer 57 is arranged which acts via a toothed belt 59 on a tooth lock washer 60. The tooth lock washer 60, on the other hand, acts in conjunction with a gearing part 61. The gearing part 61 features three meshing gears 63a, 63b and 63c; the gear 63a and the tooth lock washer 60 are connected with torsional strength. The axis of the gear 63b can be turned radially in relation to the rotation axis of the gear 63a. The twisting angle is a measure for the radial torsion of the two unbalances 56 and 64, and thereby a measure for the effective total unbalance mass, or the effective static unbalance moment $m_{u0} \cdot \text{multidot} \cdot r_u$ to $m_{u3} \cdot \text{multidot} \cdot r_u$. On the axis 65 of the gear 63c is located a gear 66 which meshes with a gear 69 located on a hollow shaft. The

hollow shaft 67 acts in conjunction with the second unbalance 64." Directly from the description there are three different gear sets the first set is tooth lock washer 57 and tooth lock washer 60 which are connected by toothed belt 59, the second gear set is three meshing gears 63a, 63b and 63c which are bevel gears as clearly shown in Fig. 8 and the third and final gear set is gear 66 and gear 69 these gears are either spur or helical gears again as shown in Fig. 8. Applicant therefore contends that the Anderegg reference despite the use of the term "planetary gear 53" does not in any way shape or form disclose a planetary gear arrangement of any kind let alone a planetary arrangement having a first and a second planetary gear set. Therefore Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 USC §103 (a), of Wall in view of Anderegg, of claims 1, 11 and 23.

Regarding the Borsutzki reference, Borsutzki does discloses a planetary gear arrangement but does not teach or even suggest the operation of a planetary gearbox having first and second planetary gear sets and the connection between the inner and outer eccentric weights via inner and outer shafts as is claimed in independent claims 1, 11 and 23. Nor does the Borsutzki reference disclose first and second planetary gear sets as is currently claimed in these independent claims. The eccentric weight 18 in Borsutzki actually rotates in conjunction with shaft 13 that is driven by rotation of crank web members 11,12 of housing 9 directly connected to planet gear 14. Gear 14 meshes with stationary gear or sun gear 15. Sun gear 15 is connected to shaft 16 and hand wheel 17, which are all stationary during operation and can be rotated independently of the planet gear 14 shaft 13 and eccentric weight 18 so as to change the eccentricities of the weight 18 to vary the vibratory force imparted by the entire mechanism. The connection between and the operation of the vibratory mechanism as claimed in independent claims 1, 11 and 23 is entirely different than the mechanism taught by Borsutzki and therefore cannot form the basis for an obviousness rejection under USC §103 (a). That is there is no motivation to change the gear arrangement taught by Borsutzki to create the mechanism as claimed. Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 USC §103 (a) of Wall in view of Borsutzki of claims 1, 11 and 23.

Regarding claims 2, 3, and 26, claims 2 and 26 depend from claims 1 and 23, respectively, which are believed to be in condition for allowance claims 2 and 26 are believed to be allowable for at least the reasons applicable to claims 1 and 23. Claim 3 has been cancelled and the rejection is therefore moot. Applicant therefore respectfully requests reconsideration and withdrawal of the rejection under 35 USC §103 (a) of claims 2 and 23.

The Examiner has rejected claims 1-3, 11, 23 and 26 under 35 USC §103 (a) as being unpatentable over Goehler US Patent 4,454,780 in view of Anderegg US Patent 6,431,790 or Borsutzki US Patent 3,719,094.

As set forth above Applicant has amended claims 1, 11 and 23 to better define that which is regarded as the invention. Again Applicant contends that Anderegg does not teach a planetary arrangement despite the use of the term planetary gear, and Borsutzki does not teach or suggest the connections of the planetary gearbox having first and second planetary gear sets to the first and second eccentric weights of the claimed invention and therefore contend that the Goehler reference in view of Anderegg or Borsutzki does not create a *prima facia* case for obviousness over claims 1, 2, 11, 23 and 26. Applicant therefore respectfully requests reconsideration and withdrawal of the rejection under 35 USC §103 (a) of claims 1,2, 11, 23 and 26. Regarding the rejection of claim 3, claim 3 has been cancelled and therefore renders the Examiners rejection of claim 3 moot.

The Examiner has rejected claims 12-14 under 35 U.S.C. §103(a) over Wall US Patent 4,152,943 or Goehler US Patent 4,454,780 in view of Anderegg US Patent 6,431,790 or Borsutzki US Patent 3,719,094 and in further view of Swanson US Pub 2003/0021629 A1 or Staffenhagen US Pub 2002/0172556 A1.

Applicant has amended claim 11 to more define that, which is regarded as the invention. Specifically, claim 11 has been amended to specifically recite that the gearbox is a “planetary gearbox having first and second planetary gear sets”. Neither the Wall, Goehler, Anderegg, or Borsutzki references teach or even suggest these features. Applicants therefore contend that none of the references cited by the Examiner teach or even suggest the limitations of independent claim 11 and the additional features of dependent claims 12-14, which is one of the three requirements as set forth in MPEP 2143 for providing a *prima facia*

case of obviousness. Applicants therefore respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) of claims 12-14.

It is respectfully urged that the subject application is in condition for allowance and allowance of the application at issue is respectfully requested.

Respectfully submitted,



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